

Notice of Allowability

Application No.

09/923,638

Examiner

Michael P Colaianne

Applicant(s)

MACE, DOUGLAS K.

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed August 7, 2001.
2. ☒ The allowed claim(s) is/are 1,2,4-7 and 9-11.
3. ☒ The drawings filed on 07 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

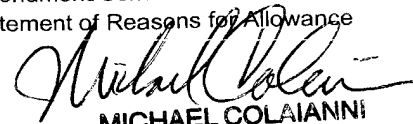
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. ____. |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. ____. | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |


MICHAEL COLAIANNI
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Meehan on June 9, 2003.

The application has been amended as follows:

WRITTEN DESCRIPTION

Page 1, line 22, before "035" insert ~~the~~—

Page 5, line 12, change "pressure" to ~~temperature~~—

Page 5, line 19, after "18" insert ~~also~~—

Page 5, line 20, after "flow" change "to" to ~~from~~—

CLAIMS

Cancel claims 3 and 8

Claim 4, line 1, change "3" to ~~1~~—

Claim 9, line 1, change "8" to ~~6~~—

Claim 9, lines 3-4, delete "and a second indirect heat exchanger"

Claim 9, line 7, after "exchanger" change "and" to ~~in~~--

Add claims 10 and 11 as follows:

--Claim 10. Apparatus according to claim 5 wherein: said pump is positioned upstream of said mixing valve, said mixing valve serving to control the treating of

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air in said indirect heat exchanger by controlling the volume of water flowing to said indirect heat exchanger, said mixing valve serving to receive water from one of said first outlet and said second outlet and for selectively delivering water from said pump to said coil of said indirect heat exchanger or for returning water from said pump to an inlet of said pump.—

--Claim 11. The method according to claim 9 wherein: the step of pumping water comprises pumping a stream of water from only one of said first outlet and said second outlet of said water cooling tower at a variable rate to the coil of the indirect heat exchanger, the stream of water being pumped at a fixed rate to a mixing valve and returned at a variable rate from the mixing valve to an inlet of a pump used in pumping water.--

The following is an examiner's statement of reasons for allowance: none of the prior art taught or fairly suggested an apparatus for delivering cooling air for cooling molds of a glass manufacturing machine having in combination all the parts recited in claim 1 and a temperature controlled three-way mixing valve upstream of the coil in the heat exchanger for receiving water from the first water outlet and the second water outlet and for controlling the treating effect of water delivered to said inlet of said indirect heat exchanger.

Also, none of the prior art examined taught or fairly suggested a method of treating air for use in cooling molds of a glass manufacturing machine have the recited steps of claim 6 and pumping water comprising water selected from the group of water

from the first outlet of the water cooling tower, water from the second outlet of the water cooling tower and a mixture of water from the first outlet of the water cooling tower and the second outlet of the water cooling tower to flow through the coil of the indirect heat exchanger to alter the temperature of air flowing through the indirect heat exchanger.

The closest piece of prior art Virey et al. US 4812156 teaches cryogenic cooling of air to cool glass molds. While Virey does teach that a water heat exchanger may be substituted for the cryogenic exchanger (col. 7, lines 37-41), Virey fails to teach or fairly suggest using a water tower; the three-way mixing valve or the pumping arrangement recited in method claim 6. Also, while Kraus et al. US 3259175 teaches that it is known to use a water tower to cool molds (Fig. 6), they do not provide motivation for combining the water tower, a three-way mixing valve or the pumping arrangement claimed in method claim 6 with Virey et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers

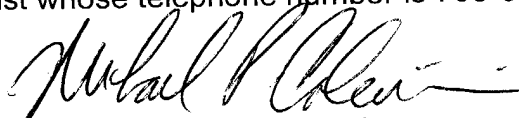
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for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Michael P Colaianni
Primary Examiner
Art Unit 1731

MPC
June 9, 2003

MICHAEL COLAIANNI
PRIMARY EXAMINER